ARRANGEMENT FOR TRAVERSING AN IPv4 NETWORK BY IPv6 MOBILE NODES VIA A MOBILITY ANCHOR POINT

ABSTRACT OF THE DISCLOSURE

An IPv6 mobile node establishes an IPv4 connection with an IPv6 router having an IPv4 interface and configured as a Mobility Anchor Point (MAP) according to Hierarchical Mobile IPv6 Protocol. The MAP assigns a valid IPv6 care-of address to the IPv6 mobile node in response to receiving an IPv4 packet carrying an IPv6 packet requesting a valid care-of address. The IPv4 packet includes IPv4 source and destination addresses, a TCP/UDP source port and TCP/UDP destination port, and a synthetic tag address in the IPv6 source address field. The synthetic tag address includes a unique identifier that enables the MAP to associate the valid IPv6 care-of address with the IPv6 mobile node. Hence, the MAP forwards an IPv6 packet, carried via the IPv4 connection from the source IPv6 mobile node, onto an IPv6 network with an IPv6 source address field that specifies the assigned valid IPv6 care-of address.